CLAIMS

What is claimed is:

1. A method for forming a receiver tube that is adapted to receive a hitch bar, the method comprising:

providing a die, the die defining a die cavity with a first portion and a second portion, the second portion of the die having a lateral cross-section that is smaller than a lateral cross-section of the first portion;

providing a hollow tube having an outer surface;

providing a punch having a body and a shaft, the shaft extending from the body and being sized to fit within the hollow tube;

loading the hollow tube within the first portion of the die;

inserting the punch into the hollow tube such that the body abuts an end of the hollow tube; and

advancing the punch toward the die such that only a portion of the hollow tube is extruded into the second portion of the die, the portion of the hollow tube in the second portion of the die forming a body portion of the receiver tube and an associated portion of the hollow tube remaining in the first portion of the die forming a head portion of the receiver tube.

2. The method of claim 1, wherein the hollow tube has a lateral cross-sectional shape selected from a group consisting of rectangular, square, and octagonal cross-sectional shapes.

- 3. The method of claim 1, wherein the first portion defines an opening that is larger than the hollow tube.
- 4. The method of claim 1, wherein the first portion includes a substantially constant portion and a transition portion, the transition portion being in juxtaposed relation with the substantially constant portion and the second portion of the die.
- 5. The method of claim 4, wherein the transition portion tapers between the substantially constant portion and the second portion of the die so that a chamfer is formed on the head portion adjacent the body portion.
- 6. The method of claim 1, wherein the portion of the hollow tube extruded into the second portion of the die has a wall thickness less than a wall thickness of the portion of the hollow tube in the first portion of the die.
- 7. The method of claim 1, wherein the shaft extends through the hollow tube after the step of inserting the punch into the hollow tube.
- 8. The method of claim 1, wherein the hollow tube has a substantially uniform wall thickness.

- 9. The method of claim 1, wherein the shaft is unitarily formed.
- 10. The method of claim 9, wherein the entire punch is unitarily formed.
- 11. The method of claim 1, wherein the grain of the material of the trailer receiver tube within the head portion and the body portion extends parallel to a longitudinal axis of the receiver tube.
- 12. The method of claim 5, wherein the grain of the material of the trailer receiver tube within the chamfer runs at an angle to a longitudinal axis of the trailer receiver tube and parallel to an outer surface of the chamfer.